

WHAT IS CLAIMED IS:

1. An RR (Return Routability) method among a mobile node, a home agent and a corresponding node, the method comprising:

the mobile node transmitting an HoTI (Home Test Init) packet to the home agent, and transmitting a CoTI (Care of Test Init) packet to the corresponding node;

the home agent transmitting the HoTI packet including first key information generated by a specified method to the corresponding node;

the corresponding node transmitting an HoT (Home of Test) packet including second key information generated by the specified method to the home agent, and transmitting a CoT (Care-of Test) packet encrypted using a secret key generated from the first key information by the specified method to the mobile node;

the home agent transmitting the secret key generated from the received HoT packet by the specified method to the mobile node; and

the mobile node decoding the received encrypted CoT packet using the received secret key.

2. The method of claim 1, wherein the specified method is a Diffie-Hellman key exchange method using public parameters and secret key parameters to generate the secret key.

3. The method of claim 1, wherein the first key information is attached to a mobile options field of the HoTI packet.
4. The method of claim 1, wherein the second key information is attached to a mobile options field of the HoT packet.
5. The method of claim 1, wherein the encryption method uses a DES (Data Encryption Standard) algorithm.
6. The method of claim 1, wherein the encryption method uses a triple DES (Data Encryption Standard) algorithm.